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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/583,999	06/22/2006	Kazumitsu Shiomi	0425-1258PUS1	3390

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EXAMINER

MCKENZIE, THOMAS B

ART UNIT	PAPER NUMBER
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1797

NOTIFICATION DATE	DELIVERY MODE
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09/07/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No. 10/583,999	Applicant(s) SHIOMI ET AL.	
	Examiner THOMAS BENNETT MCKENZIE	Art Unit 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 August 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) 4-6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 7 is/are rejected.
- 7) ☒ Claim(s) 3 is/are objected to.
- 8) ☒ Claim(s) 1-7 are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>06/22/2006; 03/31/3009; 05/14/2010; 08/13/2010</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: Claim numbers are provided in the description of the invention. These numbers should be removed.
2. Appropriate correction is required.

Claim Objections

3. **Claim 3** is objected to because of the following informalities: “aluminium” should be spelled “aluminum”. Appropriate correction is required.

Election/Restrictions

4. Applicant’s election of Group I, **claims 1-3 and 7**, in the reply filed on 08/02/2010 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. **Claims 1-2 and 7** are rejected under 35 U.S.C. 102(b) as being anticipated by Jordan et al, USP 5,779,267 (Jordan).
7. Regarding **claim 1**, Jordan teaches:

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8. A filter for a gas generator (figure 1, part 64; column 1, lines 10-15 and column 4, lines 20-30) comprising a tubular material (figure 1, part 64; column 3, lines 40-50) formed by knitting a coated metal wire (column 4, lines 25-35) in which a metal wire corresponding to a core wire ("steel wire", column 4, lines 25-30) is coated with a lower melting point metal ("zinc or copper"; column 4, lines 30-35), wherein the lower melting point metal is a metal having a melting point lower than the metal of the core wire ("copper or zinc"; column 4, lines 30-35).

9. The Examiner considers the "screen assembly" (64) (column 3, lines 45-50) to read on "a tubular member" as claimed. Figure 1 of Jordan shows a cross section of the apparatus, with the screen assembly (64) on the far left and far right of the combustion chamber (34). The screen assembly (64) surrounds the combustion chamber (34) (column 3, lines 40-50) and is interpreted to wrap around the entire chamber (34), thus forming a tubular member.

10. Although Jordan does not explicitly teaches and the intersecting parts of the coated metal wires are bonded by the affixing and solidifying of the molten lower melting point metal, this claim limitation is considered moot since it applies to the process of making the apparatus rather than the apparatus itself. The cited prior art teaches all of the positively recited structure of the claimed apparatus or product. The determination of patentability is based upon the apparatus structure itself. The patentability of a product or apparatus does not depend on its method of production or formation. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different

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process. See *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985) (see MPEP § 2113).

11. Regarding **claim 2**, Jordan teaches a melting point of the lower melting point metal for coating the metal wire corresponding to the core wire is 20°C or more lower than a melting point of the metal of the core wire (“zinc”, column 4, lines 30-35 and “steel wire”, column 4, lines 25-30). Note that zinc has a melting point around 420°C while the lowest melting point for steel is around 1130°C.

12. Regarding **claim 7**, Jordan teaches:

13. A gas generator for an air bag (column 1, lines 10-15), comprising a housing (figure 1, part 10; column 3, lines 15-20) having a gas discharge port (figure 1, part 42; column 4, lines 15-20), an ignition means actuated by an impact (“crash sensing means” and “squib”, figure 1, part 56; column 3, lines 60-65), a combustion chamber storing a gas generating agent that is ignited and burned by the ignition means to generate a combustion gas (figure 1, part 46; column 3, lines 60-65), and a filter for filtering and cooling a combustion gas (figure 1, part 64; column 4, lines 20-30), wherein the filter for a gas generator according to claim 1 is used as a filter (as described in claim 1 above).

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

16. **Claim 3** is rejected under 35 U.S.C. 103(a) as being unpatentable over Jordan.

17. Regarding **claim 3**, Jordan substantially teaches the lower melting point metal for coating the core wire is copper or zinc (column 4, lines 30-35) which substantially reads on the group selected from among copper, zinc, aluminum, tin and lead. Although Jordan does not explicitly teach the core wire is an iron wire or a stainless steel wire, iron wires are well known in the art for use in gas generator filters (as evidenced by Matsuda, US Pre-Grant Publication 2004/0207188, paragraph 111). It would have been obvious to one of ordinary skill in the art at the time of the invention to use iron wires with the apparatus of Jordan instead of steel wires since the simple substitution of one known element for another is likely to be obvious when predictable results are achieved. See *KSR International Co. v. Teleflex Inc.*, 550 U.S. ___, ___, 82 USPQ2d 1385, 1395 – 97 (2007) (see MPEP § 2143, B.) and the selection of a known material, which is based upon its suitability for the intended use, is within the ambit of one of ordinary skill in the art. See *In re Leshin*, 125 USPQ 416 (CCPA 1960) (see MPEP § 2144.07).

18. Interpreted differently, the steel wire of Jordan substantially reads on an iron wire since steel contains a significant amount of iron.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patents: 3,690,606 and 5,407,120. US Pre-Grant Publications 2003/0132623 and 2004/0061319.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to THOMAS BENNETT MCKENZIE whose telephone number is (571) 270-5327. The examiner can normally be reached on Monday-Thursday 7:30AM-5:00PM Alt. Friday 7:30AM-4:00PM EST..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, DUANE SMITH can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Duane Smith/
Supervisory Patent Examiner, Art
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